

USSN 09/540,178

Page 2

REMARKS

This response is intended as a full and complete response to the non-final Office Action mailed July 1, 2005.

Claims 1-14 and 26 are pending.

The Office Action rejected claims 1-10 and 26 under 35 U.S.C. §103 as being unpatentable over U.S. Patent No. 6,412,079 to Edmonds et al. ("Edmonds") in view of European Patent No. EP0854610 to Imanaka ("Imanaka") and further in view of U.S. Patent No. 5,889,775 to Sawicz et al. ("Sawicz").

MPEP §2143 states that to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must reach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The combination of Edmonds, Imanaka, and Sawicz fails to teach or suggest all the claim limitations. For example, the combination fails to teach or suggest the following underlined elements in claim 1.

Claim 1 recites:

In a video distribution system having provider equipment including a head-end, and associated subscriber equipment, an apparatus for improving fault tolerance, comprising:
a server comprising a plurality of server modules for storing content;
a video switch coupled to each of said server modules at said head-end for forwarding requested content from at least one of said plurality of server modules to said subscriber equipment;
a plurality of head-end controllers coupled to each server module of said plurality of server modules via at least two signal paths, wherein each communication between a head-end controller and a server module is coincidentally sent through the at least two signal paths.

380684-1

USSN 09/540,178

Page 3

None of the references in the combination, i.e., Edmonds, Imanaka, and Sawicz, teach or suggest a video distribution system including a head-end and associated subscriber equipment. Edmonds generally relates to scalable and fault-tolerant computer systems. (Edmonds, col. 1, lines 5-6). Imanaka generally relates to an Ethernet communication redundancy method of making a communication system redundant between a plurality of nodes connected to each other through Ethernet communication lines to constitute a distributed control system. (Imanaka, col. 1, lines 5-11). Sawicz generally relates to multi-stage switches for video sources. (Sawicz, col. 1, lines 7-8). General computer systems, communication systems, and switches are not the same as the claimed video distribution system with a head-end and associated subscriber equipment.

The Office Action states Edmonds and Imanaka fail to show the claimed video switch. The Office Action cites Sawicz for sending video data through a video switch in a redundant system. (Sawicz, col. 7, lines 10-41, series and stages of video switches).

Sawicz discloses a multi-stage switch for routing information signals from a head-end to connected terminal end units for use in applications where space is not readily available such as for use in aircraft and other passenger vehicles. (Sawicz, col. 1, lines 57-64, col. 2, lines 4-9). Sawicz differs from the claimed video switch that is coupled to each server module at the head-end for forwarding the requested content from the server modules to the subscriber equipment. By contrast, the video switch in Sawicz does not forward the requested content to subscriber equipment, but instead forwards information signals to connected terminal end units in the aircraft or vehicle.

Also, Sawicz does not disclose the claimed communication between the head-end controller and the server module that is coincidentally sent through the at least two signal paths. By contrast, Sawicz does not disclose sending the information signals through the same signal paths at the same time, but instead is directed towards avoiding blocking. Sawicz discloses the separation of the broadcast video (BV) and non-broadcast video (NBV) inputs to ensure that the BV inputs are not blocked, which could occur if both the BV and NBV were routed through all three switch stages. (Sawicz, col. 6, lines 54-57). The switch

380684-1

USSN 09/540,178

Page 4

includes a routing function which selects the path between the input stage and the output stage. The routing function includes a reallocation function which reallocates existing paths to free paths to avoid signal blocking. (Sawicz, abstract).

Imanaka discloses a redundancy method for Ethernet communication between nodes in a distributed control system, not the claimed video distribution system having provider equipment including a head-end and associated subscriber equipment. Also, Imanaka does not disclose the claimed head-end controllers coupled to each server module via at least two signal paths, wherein each communication between a head-end controller and a server module is coincidentally sent through the at least two signal paths. The claimed server modules and head-ends are not the same as the upper applications 17, 27 in nodes 10, 20 in Imanaka. The nodes 10, 20 in Imanaka are identical and interchangeable, but the claimed server modules and head-ends are not identical and interchangeable.

Furthermore, there is no suggestion to make the claimed combination found in the cited references. It is impermissible to use the motivation or suggestion found in applicant's disclosure. There is no motivation or suggestion in the disclosure of the general computer systems, communication systems, and switches of the cited references to make a combination for the claimed video distribution system with a head-end and associated subscriber equipment.

Therefore, claim 1 is patentable over the combination of Edmonds, Imanaka, and Sawicz under §103.

Claims 2-14 and 26 depend, directly or indirectly from claim 1 and, thus, inherit the patentable subject matter of claim 1, while adding additional elements. Therefore, claims 2-14 and 26 are also patentable over the combination of Edmonds, Imanaka, and Sawicz under §103.

The Office Action rejected claim 11 under 35 U.S.C. §103(a) as being unpatentable over Edmonds in view of Imanaka, Sawicz and further in view of U.S. Patent No. 6,578,158 to Deitz et al. ("Dietz"). Although the Office Action accidentally used the U.S. Patent No. of Edmonds while saying it was to Dietz et

USSN 09/540,178

Page 5

al. in the rejection, Applicant believes that U.S. Patent No. 6,578,158 to Dietz et al. was intended.

For the same reasons given above with respect to claim 1 and because Dietz is generally directed to computer memory systems and controlling redundant arrays of independent disks, claim 11 is also patentable over the combination of Edmonds, Imanaka, Sawicz, and Dietz. (Dietz, col. 1, lines 8-12). The computer memory system of Dietz is different than the claimed video distribution system. For example, the computer memory system lacks a head-end and subscriber equipment. Dietz fails to teach or suggest the claimed head-end controllers of the video distribution system. There is no motivation or suggestion in the disclosure of the computer memory system of Dietz or the other references cited to make a combination for the claimed video distribution system with a head-end and associated subscriber equipment.

The Office Action rejected claims 12-14 under 35 U.S.C. §103(a) as being unpatentable over Edmonds in view of Imanaka, Sawicz, Deitz and further in view of U.S. Patent No. 5,845,061 to Miyamoto et al. ("Miyamoto").

For the same reasons given above with respect to claims 1 and 11 and because Miyamoto is generally directed to a client server alternation control system reduced in influence caused by alternation control of a server conducted when a fault has occurred, claims 12-14 are also patentable over the combination of Edmonds, Imanaka, Sawicz, Dietz, and Miyamoto. (Miyamoto, col. 1, lines 6-9). The client server alternation control system of Miyamoto is different than the claimed video distribution system. For example, the client server alternation control system lacks a head-end and subscriber equipment. Miyamoto fails to teach or suggest the claimed head-end controllers of the video distribution system. There is no motivation or suggestion in the disclosure of the client server alternation control system of Miyamoto or the other references cited to make a combination for the claimed video distribution system with a head-end and associated subscriber equipment.

USSN 09/540,178

Page 6

CONCLUSION

Thus, Applicants submit that the pending claims are in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Lea A. Nicholson or Eamon J. Wall at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

10/3/05

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